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SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
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2165

MAIL DATE	DELIVERY MODE
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01/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/787,555

Applicant(s)

YOKOYAMA ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/14/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to Applicant's Amendment filed on December 14, 2007, claims 7-8 remain pending.
2. Applicant's response has overcome the previous claim objection and rejection under 112, second.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recite "periodic/event message". Terms separated by "/" imply and/or which is optional language in the claim failing to indicate what is being included or excluded in the scope of the claimed invention. What appears to be claimed is both "periodic and event message" or "periodic event message". Applicant's specification page 19 states there is a transformation between the two types of messages occurring at the gateway which is essential to the claims and appears to be missing. Otherwise, the other embodiment of only communicating using a single

message type can be taken as the broadest interpretation. Clarification and correction is requested.

It is also apparent that in light of Applicant's specification specifically Figure 1 "Memory holding the subroutines" that the claimed "means" are nothing more than software routines; however, when used in claim construction it implies hardware components under 112, sixth paragraph. It is unclear for the Examiner if the Applicant is intending to invoke the sixth paragraph or just claim the software routines if so, amendments to the claims is necessary to show the exact functions of the invention.

Claim 7, line 24, still references "said first memory means" which has been removed from earlier in the claim making it lack antecedent basis. Clarification and correction is respectfully requested.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. *Gateway Application for Automotive Network System "BEAN"*. SAE Pub. March 1-4, 1999

(from hereon in Tanaka et al.) in view of Doyle (U.S. Patent No. 5,815,071), and further in view of Breed et al. (U.S. Patent No. 6,370,475 B1).

As to claim 7, Tanaka et al. discloses a distributed computer system for an automobile comprising:

a first computer network to which at least one device that sends or receives messages is connected (See Page 1, two networks LAN's connectivity is described);

a second computer network to which at least one device that sends or receives messages in response to an event or demand is connected (See page 3, two networks); and

a gateway connected to said first and second computer networks (See Page 1, gateway between networks (LAN's) is described), said gateway comprising:

message receiving means that receives messages which said first computer network sends messages (See page 4, paragraph 4, both LAN networks are capable of sending and receiving messages);

event message sending means that produces a message from the data stored in said first memory means when said message value change detecting means detects the change of the value of the data, and that delivers the produced message to said second computer network (See page 3, wherein the gateway system transmits diagnostic messages (i.e. events), and see page 4, paragraphs 1-2, wherein "negative response" is taught (i.e. change in value that would necessitate retransmission)),

wherein said at least one device connected to said first computer network that sends or receives sending or receiving messages is an engine controlling device or an adaptive cruise control (ACC) controlling unit (See page 4, Figure 10, shows Engine control).

Tanaka et al. teaches the claimed invention but does not explicitly teach the messages are transmitted periodically.

Doyle teaches the messages are transmitted periodically (See Doyle column 2, lines 19-24, also see Doyle column 5, lines 14-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tanaka et al. by the teachings of Doyle to include the messages are transmitted periodically because its well known the telecommunication art that two different networks communicate continuously by messages that are transmitted periodically to insure proper and assured transfer of data.

Tanaka et al. as modified still does not teach said device that sends or receives messages in response to the event or demand is a navigation system or an internet terminal.

Doyle teaches the event or demand is a navigation system or an internet terminal (See Breed et al. column 36, lines 45-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the invention of Tanaka et al. as modified by the teachings of Breed et al. to include said device that sends or receives messages in response to the event or demand is a navigation system or an internet terminal because it is well known in the art that the communication between two networks can occur over the internet or with the access of a navigation system.

Tanaka et al. as modified still does not teach periodic/event message buffer means storing that stores the messages received by said message receiving means;

event/periodic message buffer means that stores data of said event message;

message value change detecting means detecting that detects a change of the value of the data included in each of the messages stored in said periodic/event message buffer means,

periodic message sending means that delivers periodically the data stored in said event/periodic message buffer means as a periodic message on the second network.

Lawson et al. teaches periodic/event message buffer means storing that stores the messages received by said message receiving means (See Lawson et al. column 11, lines 1-8, and see Lawson et al. column 11, lines 61-67, wherein although recited as an alternative, it clearly suggests that its well known in the art as replacement to the queue being used thus not novel);

event/periodic message buffer means that stores data of said event message (See Lawson et al. column 11, lines 1-8, and see Lawson et al. column 11, lines 61-67, wherein although recited as an alternative, it clearly suggests that its well known in the art as replacement to the queue being used thus not novel);

message value change detecting means detecting that detects a change of the value of the data included in each of the messages stored in said periodic/event message buffer means (See Lawson et al. column 5, lines 25-46, and see Lawson et al. column 15, lines 18-29);

periodic message sending means that delivers periodically the data stored in said event/periodic message buffer means as a periodic message on the second network (See Lawson et al. column 15, lines 25-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tanaka et al. by the teachings of Lawson et al. to include periodic/event message buffer means storing that stores the messages received by said message receiving means; event/periodic message buffer means that stores data of said event message; message value change detecting means detecting that detects a change of the value of the data included in each of the messages stored in said periodic/event message buffer means, periodic message sending means that delivers periodically the data stored in said event/periodic message buffer means as a periodic message on the second network because it provides for efficient way of communicating between diverse networks and data transfer (See Lawson et al. column 2, lines 30-35).

As to claim 8, Tanaka et al. as modified discloses wherein said gateway further comprises: wherein said value change detecting means detects a change of the value of the data by checking whether or not the this-time-value of the received message is different from the last-time-value thereof (See Lawson et al. column 11, lines 1-8, wherein a queue implies restrictions on order based on time).

Response to Arguments

7. Applicant's arguments with respect to claims 7-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For complete list of cited relevant art, see PTO-form 892.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian P. Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Neveen Abel-Jalil
Primary Examiner
January 19, 2008